

Customer No.: 31561
Application No.: 10/708,666
Docket No.: 12423-US-PA-X-0P

REMARKS

Present Status of the Application

It is noted with great appreciation that the Examiner deems claims 3, 4, 9, 11, 18 and 20 would be allowable if rewritten into independent form and any intervening claims. Accordingly, Applicants have incorporated the allowable subject matter of claim 18 into claim 13, and canceled claim 18 without prejudice and disclaimer. Therefore, after entry of the amendments to claims 13-17 and 19-22 are in proper condition for allowance. Reconsideration is respectfully requested.

Claims 1-22 are pending. At least for the following reasons, Applicants respectfully submit claims 1-12 are in proper condition for allowance. Reconsideration is respectfully requested.

Discussion of Objection to Specification

The Office Action objected to the Title of the Invention and states that a new title is required that is clearly indicative of the invention to which the claims are directed.

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In response thereto, Applicants would like to thank the Examiner for pointing out the informality and accordingly amended the Title of the Invention. Reconsideration is respectfully requested.

Discussion of the claim rejection under 35 USC 102

The Office Action rejected Claims 1, 2-6, 8, 10, 12-17, 19, 21 and 22 under 35 U.S.C. 102(e) as being anticipated by Yaegashi et al. (US-6,835,987, hereinafter Yaegashi).

Applicants respectfully disagree and would like to point out that rejection under 35 U.S.C. 102 requires that each and every elements of the claim(s) must be disclosed exactly by a single prior art reference.

Applicants respectfully submit that Yaegashi cannot anticipate the proposed independent claim 1 because Yaegashi substantially fails to teach or disclose each and every features of the claimed invention as claimed in the proposed independent claim 1. More specifically, Yaegashi substantially fails to teach or disclose a memory device comprising at least [a plurality of pairs of source lines, substantially parallel to the plurality of word lines, wherein] as required by the proposed independent claim 1. The advantage of the features recited above is that at least the source lines do not occupy any extra chip area and therefore the integration of the integrated circuit can be effectively increased.

Instead, Yaegashi substantially discloses, at col. 11, lines 60-61, a polysilicon/WSi laminated film 14 acting as control gates (word lines). In other words, the polysilicon/WSi laminated film 14, which the Examiner deems equivalent to the source

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lines (215a, 215b) of the present invention is in fact the control gates or the word lines. Accordingly, Applicants respectfully submit that Yaegashi cannot possibly meet the proposed independent claim 1 in this regard.

Furthermore, Yaegashi teaches or discloses, at FIG. 18, col. 14, lines 31-40, a conductive layer is formed in the contact hole 26 to form a source line for connecting with the source/drain diffusion layer region 23. In other words, Applicants respectfully submits that Yaegashi substantially fails to teach or disclose (a plurality of pairs of) source lines substantially parallel to the (plurality of pairs of) word lines, instead, Yaegashi substantially teaches or discloses a source line that is vertical or perpendicular relative to the word line (control gate) 14. Accordingly, Applicants respectfully submit that Yaegashi cannot possibly anticipate the proposed independent claim 1 in this regard.

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Furthermore, the Office Action stated that that Yaegashi discloses a plurality of first gates 11 disposed on the plurality of channel regions and between the substrate and the plurality of word lines; and a plurality of second gates 11 disposed on and in a direction vertical to the plurality isolation structures and the plurality of the active regions and between the substrate and the plurality of source lines. In other words, the Examiner pointed out the same gate electrodes 11 of Yaegashi to show two different gates, i.e. first and second gates, recited by the proposed independent claim 1. Accordingly, Accordingly, Applicants respectfully submit that Yaegashi cannot possibly anticipate the proposed independent claim 1 in this regard.

Claims 2-6, 8, 10 and 12, which directly or indirectly depend from independent Claim 1, are also patentable over Yaegashi at least because of their dependency from an allowable base claim.

Furthermore, because the allowable subject matter of claim 18 is incorporated into the proposed independent claim 13, and therefore claim 13 is in proper condition for allowance.

Claims 14-17, 19, 21 and 22, which directly or indirectly depend from independent Claim 13, are also patentable over Yaegashi at least because of their dependency from an allowable base claim. Reconsideration is respectfully requested.

For at least the foregoing reasons, Applicants respectfully submit that claims 1, 2-6, 8, 10, 12-17, 19, 21 and 22 are in proper condition for allowance. Reconsideration and withdrawal of above rejections is respectfully requested.

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Discussion of the claim rejection under 35 USC 103

The Office Action rejected Claim 7 under 35 U.S.C. 103(a) as being unpatentable over Yaegashi.

Applicants respectfully disagree and would like to point out that because claim 7, which depend from the proposed independent claim 1 deemed allowable over Yaegashi for at least the reasons discussed above, is also patentable over Yaegashi for at least the same reasons as well. Reconsideration and withdrawal of the above rejections is respectfully requested.

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CONCLUSION

For at least the foregoing reasons, it is believed that all pending claims 1-17 and 19-22 are in proper condition for allowance. If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is cordially invited to telephone the undersigned counsel to arrange for such a conference.

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Respectfully submitted,

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